

**Abstract**

A method and apparatus is provided for reformatting or interleaving a WDM signal that includes a plurality of optical channels having a first bandwidth and a first channel spacing. The method begins by receiving the WDM signal and dividing it into first and second subsets of optical channels each having a second channel spacing. Next, the first subset of optical channels are divided into third and fourth subsets of optical channels each having a third channel spacing. In addition, the second subset of optical channels is divided into fifth and sixth subsets of optical channels each having a fourth channel spacing. The third and fifth subsets of optical channels are combined to generate a first output WDM signal, while the fourth and sixth subsets of optical channels are combined to generate a second output WDM signal.